



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/713,648
Source: IFWP
Date Processed by STIC: 9/17/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

~~TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER~~
~~VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND~~
~~TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:~~

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebs/efs/downloads/documents.htm>) , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box-1450, Alexandria, VA 22313-1450
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Revised 05/17/04



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/713,648

DATE: 09/17/2004

TIME: 11:51:54

Input Set : A:\20010-04USA.ST25.txt

Output Set : N:\CRF4\09172004\J713648.raw

pr 4, 7, 11, 17, 20, 26, 30

4 <110> APPLICANT: POSCO
 5 POSTECH
 6 An, Gynheung
 7 Ryu, Choong-Hwan
 8 Han, Jong-Jin
 9 Kang, Hong-Gyu
 10 An, Kyungsook
 12 <120> TITLE OF INVENTION: ORGAN PREFERENTIAL GENES IDENTIFIED BY T-DNA INSERTIONAL
 13 MUTAGENESIS OF RICE
 15 <130> FILE REFERENCE: 20010-04USA
 17 <140> CURRENT APPLICATION NUMBER: US 10/713,648
 18 <141> CURRENT FILING DATE: 2003-11-14
 20 <150> PRIOR APPLICATION NUMBER: 60/427,166
 21 <151> PRIOR FILING DATE: 2002-11-15
 23 <160> NUMBER OF SEQ ID NOS: 83
 25 <170> SOFTWARE: FastSEQ for Windows Version 4.0

**Does Not Comply
 Corrected Diskette Needed**

ERRORED SEQUENCES

104 <210> SEQ ID NO: 5
 105 <211> LENGTH: 6721
 106 <212> TYPE: DNA
 107 <213> ORGANISM: Oryza sativa
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 110 <221> NAME/KEY: misc_feature
 111 <222> LOCATION: (1311)...(1400)
 112 <223> OTHER INFORMATION: segment of the T-DNA insert in line 1B-138-07
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P.4

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Output Set : N:\CRF4\09172004\J713648.raw

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hard return

Input Set : A:\20010-04USA.ST25.txt

Output Set: N:\CRF4\09172004\J713648.raw

E--> 227 t 6721<210> 6

228 <211> LENGTH: 232

229 <212> TYPE: DNA

230 <213> ORGANISM: Oryza sativa

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W--> 233 <221> NAME/KEY: misc_feature

W--> 234 <222> LOCATION: (1)...(101)

W--> 235 <223> OTHER INFORMATION: segment of the T-DNA insert in line 1D-059-12

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E--> 237 <400> SEQUENCE: 6

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240 aggattcgtc tcctctcctt ttgtttcatg atcctgtctg tgtgtgattc tggacttctg 180

241 gtgctaagtc tgggtgttgt tatgggtgtg ttgggattgg gcagtggtga gc 232

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244 <211> LENGTH: 246

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246 <213> ORGANISM: Oryza sativa

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249 <221> NAME/KEY: misc_feature

250 <222> LOCATION: (148)...(246)

251 <223> OTHER INFORMATION: segment of the T-DNA insert in line 1C-087-40

253 <400> SEQUENCE: 7

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256 accaattaat gtttgatgtt catttcattc aaacacggat ccgaggtacc aggtaccagg 180

257 tgagttccat tcttactacc acggtgctat ttttttgct atgtggctaa ttacatgact 240

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707 <212> TYPE: DNA

708 <213> ORGANISM: Oryza sativa

710 <220> FEATURE:

711 <221> NAME/KEY: misc_feature

712 <222> LOCATION: (0)...(0)

713 <223> OTHER INFORMATION: line 1B-138-07 - genomic DNA without T-DNA insert

715 <221> NAME/KEY: misc_feature

716 <222> LOCATION: (1310)...(1311)

717 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted

718 to create line 1B-138-07

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723 ggctccgcc ggctcccat ggccgcgcc ctctccacc ccgcgcgcgc ctctgtggtc 180

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725 atccgtgtga agtgtgattg acctctctct ctctctcact ctcccggcgc agcctagggg 300

726 gcgcctcctc atcggcgggg agttcgtcga gtcgcggggc gacgagcacg tcgacgtcac 360

727 caatccggta aagcccgcgc tgagcctccc cacgatcgat cgatttggga ggtgtggtgt 420

728 gggggcatgt gacagtgatt ctctgggtgt gcgcaggcga cgcaggaggg ggtgtcgcgg 480

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774 gaatgccttt ttgtttattt tcagtctaat atgggtgcaa agaactatgc aattatcctt 3240
775 cctgatgctg accgagatgc cacactgaat gcccttattg ctgctggtt tgggtgctgct 3300
776 gggcaaagg gtatggcatt gagcactgct gtttttgttg gaggttcaga gccatggtat 3360
777 atacttctgt cctgtttgtt tcttcaggat aagacctggc attaggtaat gaagtataaa 3420

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insert a
hard
return

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829 tcgcagaagt gaggtgaaaa aaaagaaagg catcttgtag gttcttcatt tgcccatcca 6540
830 tggaaataga cacatgcacc aatgcgaaat gaacagaaga ataatcgata ggcgcgggat 6600
E--> 831 gccatgcat gccataaag gtagctggtc t 6631<210> 23
832 <211> LENGTH: 3937
833 <212> TYPE: DNA
834 <213> ORGANISM: Oryza sativa
W--> 836 <220> FEATURE:
W--> 837 <221> NAME/KEY: misc_feature
W--> 838 <222> LOCATION: (0)...(0)
W--> 839 <223> OTHER INFORMATION: line 1D-059-12 - genomic DNA without T-DNA insert
W--> 841 <221> NAME/KEY: misc_feature
W--> 842 <222> LOCATION: (530)...(531)
W--> 843 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted
844 to create line 1D-059-12
E--> 846 <210> SEQ ID NO:
W--> 846 <400> 23
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848 taaaaaccct atatttgatt tattttaata tgctcagaca acgaaacaac cgattttaca 120
849 ttttttgagg atttgcttaa tataataaag ttcaggccca catgacagcg ggagattagt 180
850 ggcataatcct cccctcgctt cagcaggggc atatttcgta attacgaaat tccccctaa 240
851 aaaacccccg agctgtcctc gtaaaaccct aacaccttct cccccaatt cgctagagcc 300
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859 cggacgtgaa gcaggagacc atgcgggagg agacgggtgt cgcggttgc gaggtgtctg 780
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861 gcaccattac acattcgaag ttcattgtgt gacagcaaaa gaggcctaac ttcattctgt 900
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863 ccattgtttt tttttcgccc cttttaactg tttttttgac aggggaagaa gttggtagat 1020
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914 <210> SEQ ID NO: 24

915 <211> LENGTH: 6809

916 <212> TYPE: DNA

917 <213> ORGANISM: Oryza sativa

919 <220> FEATURE:

920 <221> NAME/KEY: misc_feature

921 <222> LOCATION: (0)...(0)

922 <223> OTHER INFORMATION: line 1C-087-40 - genomic DNA without T-DNA insert

924 <221> NAME/KEY: misc_feature

925 <222> LOCATION: (2666)...(2667)

926 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted

927 to create line 1C-087-40

929 <400> 24

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TIME: 11:51:54

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insert a
hard return

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1622 gtg

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insert a
hard
return

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 1625 <211> LENGTH: 7726
 1626 <212> TYPE: DNA
 1627 <213> ORGANISM: Oryza sativa
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 1630 <221> NAME/KEY: misc_feature
 1631 <222> LOCATION: (0)...(0)
 1632 <223> OTHER INFORMATION: line 1C-100-32 - genomic DNA without T-DNA insert
 1634 <221> NAME/KEY: misc_feature
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 1636 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted
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1710 cccaaatatc agaagtcatg cttattgttc aggtagtacc tcattctcaa atagatgggtg 4260
1711 ctttagaatg tgcctatca aacctcataa acttttgggtg gagaatataa aaaattaata 4320
1712 cattaagact tctcatgtca aaatgacatt agtagatctg tgacatctgt catgaaaaat 4380
1713 atatttttag tagttttgaa aaacataata ctataataag tactggttca aagggtgcgtg 4440
1714 acaaggggaa agaaggatta taacatcaag aatcaaaatg cattgtatac tacgagtcct 4500
1715 gtagatcaca tcagtgaat acatgttcct actggcagta ttgtctgact tcctatgttc 4560
1716 aggtttgctc cacaggtgtt gatgatgcag taatgaaaga tgaatttgac aagttgaccg 4620
1717 ttgccctgca acaaggagca gcaacatgct cacctccatt acctctaaca actatagtag 4680
1718 tgcaagtaag tttgagttct ttgtctggaa gtaagacttc tatttatagt ttctccatt 4740
1719 gcctcaacat ttcagcttgt ctaaactgac cactcttata agttttatta ctttatactg 4800
1720 tagatgtctt gctgtcctgt aactcaatat gctaccact aatatctagg agttaccatt 4860
1721 gtactaaaaa tgtataaaac atggttgata ggagttcaga aagtgcattt atctgggtac 4920
1722 atccgatcac tggtagaata tgttaccct tgaaccaa cttatgtaat ttataatggt 4980
1723 atatttgcaa ctacggaatc ttttactgct atgcaggat cacaaggaa tttcaaagtc 5040
1724 tgcaccagct gattgtccat tgatccact attggtgcca aaagtagatc aatcagaagg 5100

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1726 aacagcattt tttcaggtta gctaaaactg cagacagctt tgtccattgg ctatcacggt 5220
1727 tcaatttggg aatgactcac tattacacag gtcaatactc tcgctgcaga aagattgtat 5280
1728 acccttgctg gtgattgggc caacctcaat tcgggcacat tactttttga cgtatgttgt 5340
1729 ggaacaggaa caattggaact gaccttggca caccgtgttg gaatggtgat ttctccatt 5400
1730 catttcatgt gattgtgcat gatacttctt attaccgta taatgctcag ccacagctgg 5460
1731 gctctttatt aacttatgta gaattttgga aatgtcatgg tagagaagtc aatgaatgat 5520
1732 ttagcgaatt ccttgcaaaa tgtgcagggt gttggaatcg aaatgaatga atcagcagtt 5580
1733 tctgatgctg agagaaatgc gctcattaac ggtgtatcaa attgtcgctt tgtctgtggg 5640
1734 aagggtgaggc ttatgccctt gtattcctag aagtttctat cattctattg tcaactgactc 5700
1735 actgtagcca ccattggtgtc aatcctattc agtttttctt atgtcctact ttatatactc 5760
1736 accacatcag gctcatctga attttacatc ttgggattaa acaggccgaa gatgtgatgg 5820
1737 ggtctcttct cactgaatat cttgggtcac cgcagcagga cattcctgtt tctgaagggt 5880
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1761 gctgctggcc tagaacatca atttttcatg ttaaatgaat tgcactcaa aaggaccaca 7320
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1766 atatttgtgc tcagattgta atattgtcaa taggggtgata aaaaagaggt tcagttcctt 7620
1767 gctactcatt ggctgcatct ggtaaaggat ggcctaacat agactaataa atatctaaat 7680
E--> 1768 gcatggagat ggagtcaatt tcttgtgggt cccactagac aagaaa 7726<210> 33
1769 <211> LENGTH: 2417
1770 <212> TYPE: DNA
1771 <213> ORGANISM: Oryza sativa
W--> 1773 <220> FEATURE:
W--> 1774 <221> NAME/KEY: misc_feature

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insert a
hard
return

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W--> 1775 <222> LOCATION: (0)...(0)
W--> 1776 <223> OTHER INFORMATION: line 1C-142-27 - genomic DNA without T-DNA insert
W--> 1778 <221> NAME/KEY: misc_feature
W--> 1779 <222> LOCATION: (2020)...(2021)
W--> 1780 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted
1781 to create line 1C-142-27
E--> 1783 <210> SEQ ID NO:
W--> 1783 <400> 33

```

1784 cgggggaaaa aatgcgttgt acccaatgca ttatctcctt tttctttcat ttagaaaagg 60
1785 cgggtgagggg aattttatgc tgggtggcac cctttttccc tcttttataa agtccacccg 120
1786 acctcaccta atgtcaaaaag aaaccaacgg caggaggagg gagacacctc gaggaacca 180
1787 cagcacccaa agaacaagaa aggcgatacc ccttctccca ccaccaccgt ttccgtccat 240
1788 ctccatcctc accgcggcg acgtcacct cgcgacgcg atcggcgacc tgcttcagcc 300
1789 atggcaatgg cttacaagat ggtaatccag tctgtcacac acctgggtta ttgagtcct 360
1790 gggtcgtcgt cgttgccggc ttctgatgga gtatgtgggt tgggtgcgtc tgtgcaggcg 420
1791 acggagggga tgaacgtgaa ggaggagtgc cagaggtggt tcatggagat gaagtggaa 480
1792 aagggtgcacc ggttcgtggg gtacaagatc gacgagcgtt cgcgcgccgt gctggtggac 540
1793 aagggtggcg gccccggcga agggtagcag gagctcgtcg ccgcgctgcc caccgacgac 600
1794 tgcgcgtacg ccgtcttcga cttcgacttc gtcaccgtcg acaactgcc aagaagcaag 660
1795 atcttcttca tcgcctggta attaatatc ccaaccagc tcctccctct aattaatctc 720
1796 ttatcaagtg attcgattcc atcttattcc atgtctgac tcgattaact agcggtaatt 780
1797 caggatcttg ttaggaaagg taaacacggt gagctgtatc catcgtaga tgccatatct 840
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1801 tgcactaatg aagaactcta agttcatgca attacacaat gtacgcgcaa cttacttaat 1080
1802 acctaaacct cgattgatca tagtcgtttc gtaccataag aaaagatgac acatatcaca 1140
1803 atcactcatc gcgtcatgat tgagaaatca aattaattct ggcaccttac atactattgt 1200
1804 acactggcag acaagtctc ctgagcctta ttaggtgctg acgagcatca taaaaacgac 1260
1805 taaaaatctg cagggcgaat gactgttcca atcaatgcc catccttatc acaagaagg 1320
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1807 atccccgttg ccttgctcaa cgaagcttta gtcgaaatca tgacggggac ccatcatctt 1440
1808 tgttaatcac tgttgcctt agtacacttc atgcataatt ttgcttaatt aacctccact 1500
1809 gccaggcccg gttcttttat cagatctgat ctggcctgaa tccacctgtt gtcgatctgt 1560
1810 ctgtccttgt atattcatag atccatcatc aaaagcaagg ttctgtgcga cccacgccag 1620
1811 tagtagccac agctgcagta ttattgtcca ttcaacattt cactgtcttt agtgcagttc 1680
1812 aattacttct ttctggcat gtccttttgt caagaaacaa agattatcag ataagatcga 1740
1813 gaggtatact ttaacaccca acaacaaca caattagagt actgttaagt gagtccatct 1800
1814 gctatctagc tctagtttcc ttttgttaaa cactttgaaa ggactttggt tcgatagcaa 1860
1815 ccgctgcagt tgcaaatgt caatattgtt tagcgagtag cagcctgcac tgtcgttgat 1920
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1819 gaggcgcgc tcagtgaagt gagtcctcc ggccgcggcg cgcgcgcgcg acgcgatgag 2160
1820 tcgcgggcgg ggttgccggc ctgtacttag cacgtactca ccccgagtgt gtgtggtata 2220
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1822 gacgaggggt tgtgaatttg gtttagagtt tggcgtggcg tggcgtgctg tttcgttttg 2340
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1824 aacgtcccat gtcgggtg

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2417

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1826 <210> SEQ ID NO: 34
 1827 <211> LENGTH: 4941
 1828 <212> TYPE: DNA
 1829 <213> ORGANISM: Oryza sativa
 1831 <220> FEATURE:
 1832 <221> NAME/KEY: misc_feature
 1833 <222> LOCATION: (0)...(0)
 1834 <223> OTHER INFORMATION: line 1C-140-04 - genomic DNA without T-DNA insert
 1836 <221> NAME/KEY: misc_feature
 1837 <222> LOCATION: (773)...(774)
 1838 <223> OTHER INFORMATION: location in genomic DNA where T-DNA was inserted
 1839 to create line 1C-140-04
 1841 <400> 34
 1842 ataatccaaa atttaatcca cactttttaa tggattcgaa cggggccata gtactgtcac 60
 1843 ttttcttatt taagatatag aatttacatc ggttttcatt aacaagcttt aatttcacct 120
 1844 ctgaatccaa aattctccaa attatctcca ctctccatcc tctaatacaa taagaacaag 180
 1845 cagcccttct aaaaaaaaaa aaaaagaaag aaaaagaaag aaaaaaaaaa gaaagaagaa 240
 1846 ggagcaagcc tcgcctactt aagcacaaca gcagccttgc tccagctgcg agctagagcc 300
 1847 atggcgaccg gagagctcgc tctcgtgtcc tcgctgttca tcgtcgtcgt gttcctcttg 360
 1848 cttggtgctg tggcgagaga ggcttctgcg ctcacccggc atgacttccc cgagggtctc 420
 1849 gtcttcggcg caggctcctc cgctttccag gtatatatac ataaaatcca tcgatcatgc 480
 1850 atgtcagaag ctcatcatgc tcagatgtc atcctgtc ca cgtcaatgc tcatgctctg 540
 1851 ctgaaatttg gcggaatttg ttgcatcgga tttgtgttcc cgtattgcat catgtttgta 600
 1852 tatgccaaga tatgtgctta ctaccgtgtg agcaatgctg ttcaagaact gaatttgttt 660
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 1854 ccagcatttg ggacaccttc atccatcaag gtccaaaaaa atggagtaga tgataatctt 780
 1855 ctctcatgc ttttattcta gaacattttt tttcttgtat gttctttatt tacgcatgca 840
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 1858 ttcagatatg acacaaaatc tataaaaaag atcagtttaa tctacctttt tttattttca 1020
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 1860 cattgcttgg cctcgtctta ttccgggtag acataatcac ataaataagg tagtactact 1140
 1861 gaatatcttc tgaacactta tgacagttag tttcaaattg tttttagatg gaagaggaga 1200
 1862 gatcaacccc aagggcttgg agtactacaa caatctgata gacgaattga taatgcatgg 1260
 1863 tacacattac ttgctgcacc ttggatttat tcctagctga atcttgatcg gtagactcat 1320
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 1877 gcaggcaatt caaggaggcc agatagggat cactctcatg gttcgggtggc atgagccata 2160

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1878 caccgacaaa acagccgatg cagctgctgc cattaggatg aatgaattcc atattggatg 2220
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1880 aactactact ccctccgttt caaaatgttt gacaccgtcg actttttaag tacgtgtttg 2340
1881 atcattcgtc ttattcaaaa aattttaaata attatttatt cttttcatat catttgattc 2400
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1922 tttgtatggg tgccgtctga atgacctct gatgggacgg ccataaccta cctccacttc 4860
1923 cgcggagggc aggcgcgacg tgggaacgtg gctgtctgct gacgacatga ccagtgtcag 4920
1924 accggttaca aatcggtcat t 4941
2390 <210> SEQ ID NO: 47
2391 <211> LENGTH: 6534

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2392 <212> TYPE: DNA
2393 <213> ORGANISM: Oryza sativa
2395 <220> FEATURE:
2396 <221> NAME/KEY: misc_feature
2397 <222> LOCATION: (0)...(0)
2398 <223> OTHER INFORMATION: line 1C-109-51 coding sequence
2400 <400> SEQUENCE: 47
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2403 ggcgagcccg agacgctctg gggcaggatc gaccccagga gcttcggcga ccgcgccgtc 180
2404 caggccaagc ccccgagct cgaggagaag ctaccaagt cccgcaagaa gaaggccgcc 240
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2406 gccagagtg aggtcagcgt cctctcgctc accgacgacg tcgtctacaa gcccagacc 360
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Insert a
hard
return

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TIME: 11:51:54

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4192 tctcacataa aacagggcac acaggttaca acaacgaggg ttgtaagccc attaaagccc 2820
4193 aaacatcaga tcaccacaag caaatgtctc gaagacacac gcacacggca acaggataac 2880

```

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Input Set : A:\20010-04USA.ST25.txt

Output Set: N:\CRF4\09172004\J713648.raw

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4194 tccacactgg  cagatcatgg  gatagcagca  gttatcaatc  aggccttgac  acacagaaca  2940
4195 tcaagcccc  agacgacgac  gactcctcta  gatcccggtc  ggcactctact  ctattccttt  3000
4196 gccctcggac  gagtgctggg  gcgtcggttt  ccactatcgg  cgagtacttc  tacacagcca  3060
4197 tcggtccaga  cggccgcgct  tctgcgggcg  atttgtgtac  gcccgacagt  cccggctccg  3120
4198 gatcggagca  ttgcgtcgca  tcgacctgc  gcccaagctg  catcatcgaa  attgccgtca  3180
4199 accaagctct  gatagagttg  gtcaagacca  atgcggagca  tatacgcccc  gagccgcggc  3240
4200 gatcctgcaa  gctccggatg  cctccgctcg  aagtagcgcg  tctgctgtct  catacaagcc  3300
4201 aaccacggcc  tccagaagaa  gatgttggcg  acctcgtatt  gggaaatccc  gaacatcgcc  3360
4202 tcgctccagt  caatgaccgc  tgttatgcgg  ccattgtccg  tcaggacatt  gttggagccg  3420
4203 aaatccgct  gcacgaggtg  cgggacttcg  gggcagtcct  cggcccaaag  catcagctca  3480
4204 tcgagagcct  gcgcgacgga  cgcactgacg  gtgtcgtcca  tcacagtttg  ccagtgtata  3540
4205 acatggggat  cagcaatcgc  gcatatgaaa  tcacgccatg  tagtgtattg  accgattcct  3600
4206 tgcggtccga  atgggcccga  cccgctcgtc  tggctaagat  cggcgcgacg  gatcgcatcc  3660
4207 atggcctccg  cgaccggctg  cagaacagcg  ggcagttcgg  ttccaggcag  gtcttgcaac  3720
4208 gtgacacct  gtgcacggcg  ggagatgcaa  taggtcaggc  tctcgctgaa  tcccccaatg  3780
4209 tcaagcactt  ccggaatcgg  gagcgcggcg  gatgcaaagt  gccgataaac  ataacgatct  3840
4210 ttgtagaaac  catcggcgca  gctatttacc  cgcaggacat  atccacgccc  tctacatcgc  3900
4211 aagctgaaag  caccgagatt  ttcgcccctc  gagagctgca  tcaggtcgga  gacgtgtcgc  3960
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4213 cattgcccc  cgggatccgt  cgagtcagcc  tgaaaggaca  aaatacatgt  tagcgcctta  4080
4214 gtggtacatt  attatttcag  tacagcaaga  taacacaatt  caaaagactg  acccataata  4140
4215 aataactagt  cctcaattta  aaatttgagt  tctaaatag  acatctatga  atatgctgta  4200
4216 catcggcact  acagaaaata  cgattcccaa  taattgaaca  attgtacttt  atttagttgt  4260
4217 tactacaaca  atggaagata  caagatcggt  tcaaaactac  catacatgca  tggagtattt  4320
4218 gttccacaga  tctggaaaaa  acagatctga  cgggcagtg  caccaaacac  tagacatatg  4380
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4221 tgacatagct  gtaaaacatc  atgatctatc  atatcaacta  gaggggatct  cggcatgtat  4560
4222 cattctattg  catctagaac  catagcattt  ccattgtgac  aacaattttg  aaacatacat  4620
4223 tgctcagatc  taccataaga  acaccatggt  catgacagca  tcgaccatga  tttccacatt  4680
4224 taacagcatc  ccgaggtcag  atccagtgtt  tagaactatc  atttcagcaa  aattcacaaa  4740
4225 ataaatcctc  caattcgctc  acatatatcc  attccacgca  tcctaggacc  agatccacca  4800
4226 taccagtata  caccgaacta  aacatttca  tccagtcgc  taactacgac  agagaaaaacg  4860
4227 cagatccaga  caaccagatc  caccgacaaa  taaacacagc  cccccacatc  caacaaccgc  4920
4228 gaatccaccc  agatctgacc  cagaagcagg  caccgaagaac  acgggggggtg  agggagatgg  4980
4229 gacgcggatc  caagcttggc  ggcggattgg  gttgatgctg  cgacggcggc  ggagaagggg  5040
4230 gagaggggag  agggagaaaa  gcgcggaggc  gcggagagag  gcgagtacga  agacgccttt  5100
4231 ctctgcgttg  tctcggttta  ggggtttgca  tccccgact  ccgcccgttt  tataggggca  5160
4232 gacagcctgg  acctctcagg  agcggaaagc  aagggatggg  ggagtttttc  gttttacccc  5220
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4234 gatcatatcg  agaataattt  ataagttagg  gagctttctg  ataatatcca  ccgcaaggag  5340
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4241 gccgcaccgg  actattcggc  ccagttccat  tttggcccaa  cttgaaacag  cgcggagcac  5760
4242 aagacggggg  agcccattta  ggcccgtaat  ctacgcctg  tagaaagtcc  gtgtcgttgc  5820

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RAW SEQUENCE LISTING

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Input Set : A:\20010-04USA.ST25.txt

Output Set: N:\CRF4\09172004\J713648.raw

4243 gatggaccag aaagcccata aaccttggag gcgttctctg ctgggaataa aataagttca 5880
 4244 cactctgtcc ctcaacttta cgtcgagttt gtttgacatc gctaattgcc agtaccagaa 5940
 4245 atcttggata caaataaggt ttgatataaa gtggcacgtg gtgaatggca tcgtttgaaa 6000
 4246 aatcttcaga tcgagcgggc ttcacaagcc gtaagtgcaa gtgccaaaat ttgtgaagaa 6060
 4247 aattacttcc ttcatttcac aatgtaagtt attttagcat tttccacatt catattgata 6120
 4248 tcaataaatt tagatagata tatatgtctg aattcgtacc gttaacgagc tctagaagct 6180
 4249 tcagtactac gcgtctcgag aattcgtac attaaaaacg tccgcaatgt gttattaagt 6240
 E--> 4250 **tgtctaagcg tcaatttgtt tacaccacaa tatatcctgc ca** 6282<210> 70
 4251 <211> LENGTH: 43
 4252 <212> TYPE: DNA
 4253 <213> ORGANISM: Artificial Sequence
 W--> 4255 <220> FEATURE:
 W--> 4256 <223> OTHER INFORMATION: synthetic oligonucleotide
 E--> 4258 <210> SEQ ID NO:
 E--> 4258 <400> SEQUENCE: 70
 4259 gggtcgacga ggtacaaggt acaaggtaca gacttgtatc ctt 43
 E--> 4261 <210> SEQ ID NO: 71
 4262 <211> LENGTH: 50
 4263 <212> TYPE: DNA
 4264 <213> ORGANISM: Artificial Sequence
 4266 <220> FEATURE:
 4267 <223> OTHER INFORMATION: synthetic oligonucleotide
 4269 <400> SEQUENCE: 71
 4270 cgggtaccac ctgcatataa cctgcatata acctgcacat tagcaataaa 50

Insert a
 hard
 return

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Input Set : A:\20010-04USA.ST25.txt

Output Set: N:\CRF4\09172004\J713648.raw

L:227 M:254 E: No. of Bases conflict, LENGTH:Input:6 Counted:6723 SEQ:5
 L:227 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:227 M:252 E: No. of Seq. differs, <211> LENGTH:Input:6721 Found:6723 SEQ:5
 L:232 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
 L:233 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:234 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:235 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:237 M:282 E: Numeric Field Identifier Missing, <210> is required.
 L:237 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:5 differs:6
 L:243 M:214 E: (33) Seq.# missing, SEQ ID NO:6
 L:473 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18
 L:510 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19
 L:577 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20
 L:671 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:21
 L:720 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:22
 L:831 M:254 E: No. of Bases conflict, LENGTH:Input:23 Counted:6633 SEQ:22
 L:831 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:831 M:252 E: No. of Seq. differs, <211> LENGTH:Input:6631 Found:6633 SEQ:22
 L:836 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
 L:837 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:838 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:839 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:841 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:842 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:843 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:846 M:282 E: Numeric Field Identifier Missing, <210> is required.
 L:846 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:23
 L:846 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:22 differs:23
 L:914 M:214 E: (33) Seq.# missing, SEQ ID NO:23
 L:929 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:24
 L:1043 M:254 E: No. of Bases conflict, LENGTH:Input:25 Counted:6811 SEQ:24
 L:1043 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:1043 M:252 E: No. of Seq. differs, <211> LENGTH:Input:6809 Found:6811 SEQ:24
 L:1048 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
 L:1049 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:1050 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:1051 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:1053 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:1054 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:1055 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:1058 M:282 E: Numeric Field Identifier Missing, <210> is required.
 L:1058 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:25
 L:1058 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:24 differs:25
 L:1143 M:214 E: (33) Seq.# missing, SEQ ID NO:25
 L:1158 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:26
 L:1209 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:27
 L:1298 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:28
 L:1369 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:29

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L:1448 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:30
 L:1583 M:254 E: No. of Bases conflict, LENGTH:Input:31 Counted:8095 SEQ:30
 L:1583 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:1583 M:252 E: No. of Seq. differs, <211> LENGTH:Input:8093 Found:8095 SEQ:30
 L:1588 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
 L:1589 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:1590 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:1591 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:1593 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:1594 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:1595 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:1598 M:282 E: Numeric Field Identifier Missing, <210> is required.
 L:1598 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:31
 L:1598 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:30 differs:31
 L:1624 M:214 E: (33) Seq.# missing, SEQ ID NO:31
 L:1639 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:32
 L:1768 M:254 E: No. of Bases conflict, LENGTH:Input:33 Counted:7728 SEQ:32
 L:1768 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:1768 M:252 E: No. of Seq. differs, <211> LENGTH:Input:7726 Found:7728 SEQ:32
 L:1773 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
 L:1774 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:1775 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:1776 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:1778 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:1779 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:1780 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:1783 M:282 E: Numeric Field Identifier Missing, <210> is required.
 L:1783 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:33
 L:1783 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:32 differs:33
 L:1826 M:214 E: (33) Seq.# missing, SEQ ID NO:33
 L:1841 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:34
 L:2509 M:254 E: No. of Bases conflict, LENGTH:Input:48 Counted:6536 SEQ:47
 L:2509 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:2509 M:252 E: No. of Seq. differs, <211> LENGTH:Input:6534 Found:6536 SEQ:47
 L:2514 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
 L:2515 M:281 W: Numeric Fields not Ordered, <221> not ordered!.
 L:2516 M:281 W: Numeric Fields not Ordered, <222> not ordered!.
 L:2517 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:2519 M:282 E: Numeric Field Identifier Missing, <210> is required.
 L:2519 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:47 differs:48
 L:2531 M:214 E: (33) Seq.# missing, SEQ ID NO:48
 L:4145 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:69
 L:4250 M:254 E: No. of Bases conflict, LENGTH:Input:70 Counted:6284 SEQ:69
 L:4250 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
 L:4250 M:252 E: No. of Seq. differs, <211> LENGTH:Input:6282 Found:6284 SEQ:69
 L:4255 M:281 W: Numeric Fields not Ordered, <220> not ordered!.
 L:4256 M:281 W: Numeric Fields not Ordered, <223> not ordered!.
 L:4258 M:282 E: Numeric Field Identifier Missing, <210> is required.
 L:4258 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:69 differs:70

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L:4261 M:214 E: (33) Seq.# missing, SEQ ID NO:70